

**REMARKS**

Claims 7 and 11-13 are pending.

Claim 7 has been amended to correct the formula to include “j,” which was inadvertently deleted in the Amendment filed October 14, 2004. In addition, claim 7 has been amended to more specifically recite the definition of R<sup>1</sup> and G. Support for these amendments are found in the description at page 9, lines 14-30 and compound No. 2174 of the present specification. Accordingly, no new matter is added and entry of the amendment is requested, respectfully.

**I. Claim Rejections Under 35 U.S.C. § 112, Second Paragraph - Indefiniteness**

At pages 2 and 3 of the Office Action, claims 7 and 11-13 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

**A.** The Examiner stated that there is insufficient antecedent basis for the limitation “j” in claim 7, because formula (I) does not include a “j.”

Formula (I) in claim 7 did not include the variable “j,” due to an error introduced in the Amendment filed October 14, 2004.

This has been corrected by amending claim 7 to include the “j” in formula (I), as supported at page 5 of the specification and in original claim 1.

**B.** In addition, the Examiner stated that claim 7 is indefinite because a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite.

Specifically, the Examiner noted that claim 7 broadly recites that  $k$  represents an integer of 0 to 2, and  $m$  represents 2 or 3. The Examiner also pointed out that the claim more narrowly recites that  $m + k$  must be 3. The Examiner concluded that because when  $k$  is 2,  $m + k$  is at least 4, the claim is indefinite.

In response, claim 7 has been amended to recite that  $k$  is 0 or 1.

Accordingly, the Examiner is requested, respectfully, to reconsider and remove this rejection.

## **II. Claim Rejections Under 35 U.S.C. § 103(a) - Obviousness**

### ***A. Claims 7, 12, and 13***

At pages 3 and 4 of the Office Action, claims 7, 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogers et al., WO 0031032 (cited in the IDS filed February 23, 2005) in view of Chen et al. (Nature 385, 645-649 (1997), cited in the IDS filed December 22, 2004).

Specifically, the Examiner stated that '032 teaches pyrrolidine-derivative CCR3 receptor antagonists with a general formula I, wherein  $Z$  may be  $N$ ;  $A$  may be  $-NCO-$ ;  $B$  is alkylene with 1-4 carbon atoms wherein one of the carbon atoms may optionally be replaced by  $-C(O)-$  or  $NC(O)-$ ; and  $Ar^1$  and  $Ar^2$  may be aromatic or heteroaromatic rings. The Examiner contended that the compounds described in '032 meet all of the limitations recited in the present claims, except that where in '032  $n$  is 1,  $n$  must be 0 in the present claimed compounds (citing pages 2 and 3 of the '032 reference).

The Examiner further stated that '032 discloses particular examples of compounds that meet the limitations recited in the present claims. In particular, the Examiner pointed to Compounds 60, 69, 77, and 81, at pages 20-22 of the reference. According to the Examiner, the reference indicates that those particular compounds are useful pharmaceutical agents for treating CCR3 receptor-associated disorders, particularly eosinophil-mediated inflammatory diseases (citing the abstract, pages 1 and 2, and the claims). The Examiner concluded that while '032 does not expressly teach using the presently claimed compounds for treating the particular eosinophilic disorders recited in the present claims, such use would have been obvious to one of ordinary skill in the art because the present compounds are structural homologues of the reference compounds.

**B. Claim 11**

At pages 4 and 5 of the Office Action, claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over '032, for reasons as set forth above, and in further view of Chen et al.

According to the Examiner, '032 does not expressly teach using CCR-3 receptor antagonists for treating AIDS. However, the Examiner stated that Chen, *et al.* teach that CCR3 is a co-receptor for HIV-1. Therefore, the Examiner concluded that it would have been *prima facie* obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to use CCR3 receptor antagonists of the present invention for treating AIDS patients.

For the following reasons, the rejections are overcome.

Claim 7 has been amended to recite that R<sup>1</sup> is a naphthyl group or specific aromatic heterocyclic groups. The groups have two to three heteroatoms and a condensed ring, and are one of an imidazolyl group, a pyrazolyl group, an oxazolyl group, an isoxazolyl group, a thiazolyl group, an isothiazolyl group, a pyrimidinyl group, a triazinyl group, a triazolyl group, an oxadiazolyl group, a thiadiazolyl group, a thienothienyl group, an indolyl group, a benzofuranyl group, a benzothienyl group, a quinolyl group, a benzimidazolyl group, a benzoxazolyl group, a benzotriazolyl group, a benzoxadiazolyl group, and a benzothiadiazolyl group.

In addition, claim 7 has been amended to recite that G is one of -NH-CO-, -NH-CO-NH-, and -NH-CS-NH.

In contrast, compounds actually prepared and assayed in Rogers are limited to compound Nos. 1 to 124 only. Rogers, *et al.* do not describe a compound of the formula (I) of the present invention wherein when k is 1 and m is 2, then n is 0. Also, the closest compound of Rogers, *et al.* to that of the present invention is compound No. 77. However, B (corresponding to G of the formula (I)) of compound No. 77 is CH<sub>2</sub>N(CH<sub>3</sub>)CO. In contrast, according to the present invention, the nitrogen in G is not substituted with a methyl group. Further, Ar<sup>1</sup> (corresponding to R<sup>1</sup> of the formula (I)) of compound No. 77 is 3,4-dichlorophenyl, whereas R<sup>1</sup> of the compounds of the present invention does not include phenyl and is an aromatic heterocyclic group having two to three heteroatoms and a condensed ring. Thus, even the closet compound in Rogers, *et al.* differs from the compounds of the present invention in at three structural aspects. Further, Rogers, *et al.* have not prepared nor assayed any such compounds.

In addition, the general formula (I) of Rogers, *et al.* is so broad and contains so many choices of variables that it cannot be considered to teach the more specific group of compounds of the present invention or that they exhibit CCR3 antagonist activity.

With respect to Chen, *et al.*, Chen, *et al.* do not describe the compound itself having CCR3 antagonistic activity.

Consequently, even if the teachings of Rogers, *et al.* and Chen, *et al.* were combined, the present invention would not result.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

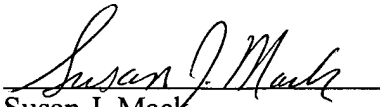
Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
Susan J. Mack  
Registration No. 30,951

Date: May 25, 2006